



que estamos construyendo

# URBAN AGRICULTURE AS A NATURE BASED SOLUTION IN BOGOTA CITY

**Martha Perdomo**  
Bogotá Botanical Garden  
General Manager

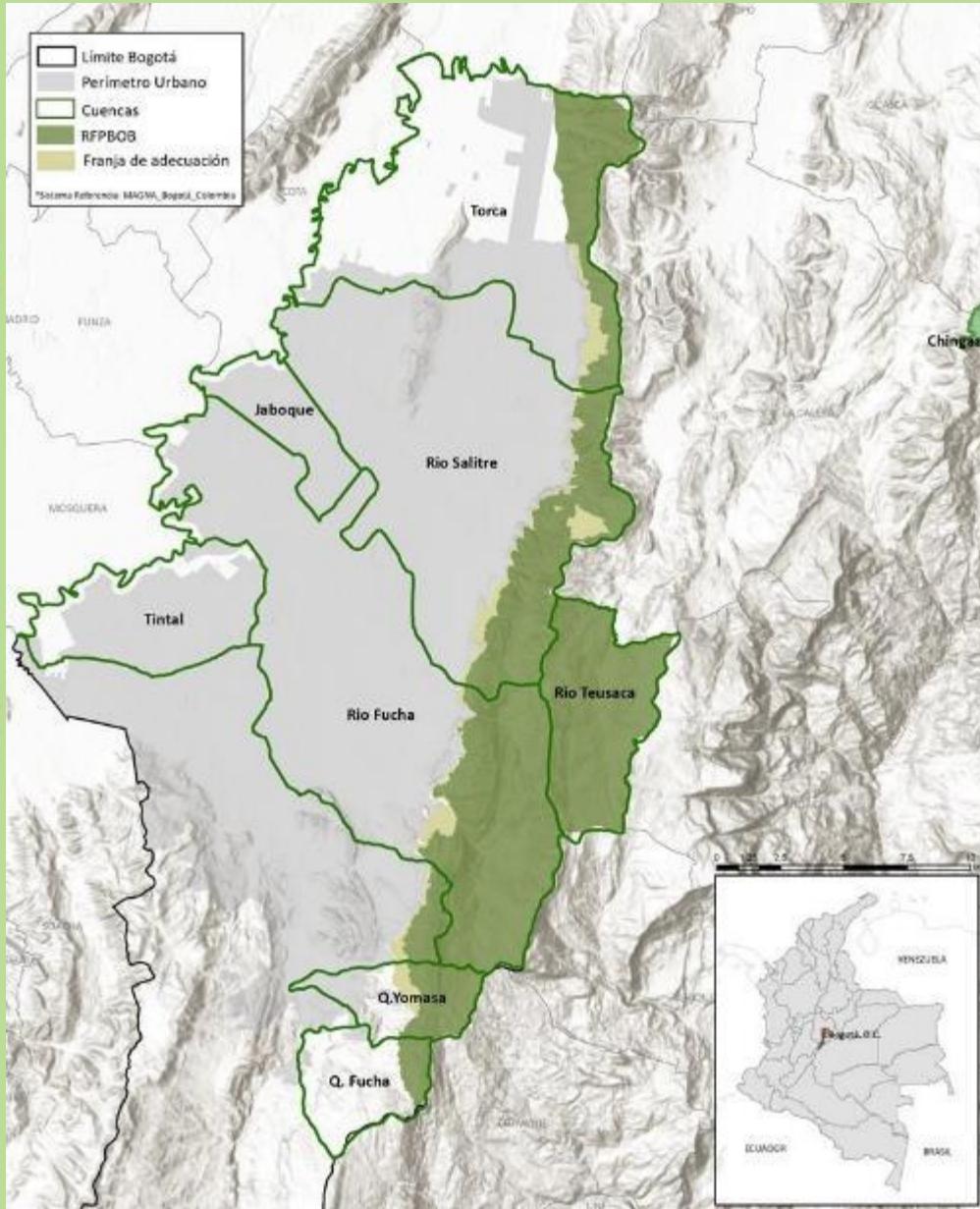
28/09/2022



# GEOGRAFIC LOCATION



# B O G O T Á



Extension: 1.775 Km<sup>2</sup>

Urban area: 25 %

Rural area: 75 %

Population: 8'380.801 (2020)

urban population: 98%

Rural population 2 %

Altitude 2.640 m.s.n.m. (8,448 f.o.s.l.):

Andinean and Paramo ecosystems

Colombian Andes mountain range

# JARDÍN BOTÁNICO DE BOGOTÁ EN EL PDD "UN NUEVO CONTRATO SOCIAL Y AMBIENTAL PARA LA BOGOTÁ DEL SIGLO XXI"

## 5 propósitos

1

Hacer un nuevo contrato social con igualdad de oportunidades para la inclusión social, productiva y política.

2

Cambiar nuestros hábitos de vida para reverdecer a Bogotá y adaptarnos y mitigar el cambio climático

3

Inspirar confianza y legitimidad para vivir sin miedo y ser epicentro de cultura ciudadana, paz y reconciliación

4

Hacer de Bogotá Región un modelo de movilidad, creatividad y productividad incluyente y sostenible.

5

Construir Bogotá región con gobierno abierto, transparente y ciudadanía consciente

## 30 logros de ciudad - JBB 6 Logros

Ingreso de hogares      Reducir pobreza      Sistema distrital de cuidado      Jóvenes

Ruralidad      Inclusión productiva      Participación y transformación cultural

Modelo de salud      Brechas de cobertura y calidad en educación      Vivienda

Proteger la fauna urbana      Reducir la contaminación      Sistema hídrico

Cambio climático      Áreas estratégicas      Espacio público y áreas verdes

Estructura ecológica principal      Reciclaje y disposición de residuos

Paz y reconciliación      Violencia contra la mujer

Reducción de delitos, muertes y hechos violentos

Ilegalidad, conflictividad e informalidad      Autorregulación y diálogo social

Experiencia de viaje      Infraestructura y actividades para el uso del tiempo libre

Aglomeraciones productivas y sectores de alto impacto

Gobierno Abierto de Bogotá      Territorio inteligente

Integración y ordenamiento territorial      Gestión Pública efectiva



"A new environmental and social contract for the Bogota of the 21<sup>st</sup> century"



## Mission Statement

To investigate and conserve the vegetation of the Andean and Paramo ecosystems, contributing to the **generation, application and social appropriation** of knowledge in order to be able to adapt to climate change, improve quality of life and aim for the sustainable development of the city and the region.



## Vision Statement



In 2038 we will be recognized nationally and internationally as a **benchmark research center on Andean and Paramo ecosystems, and as a natural destination**, which contributes to the transformation of the environmental thinking and the sustainable development of the territory.

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## Researching to Preserve



by researching and generating new knowledge in conservation, ecological restoration and sustainable use of flora, in key natural city areas.

## Green Management



by improving and increasing biodiversity, connectivity, natural features and services of the city's vegetation and green infrastructure.

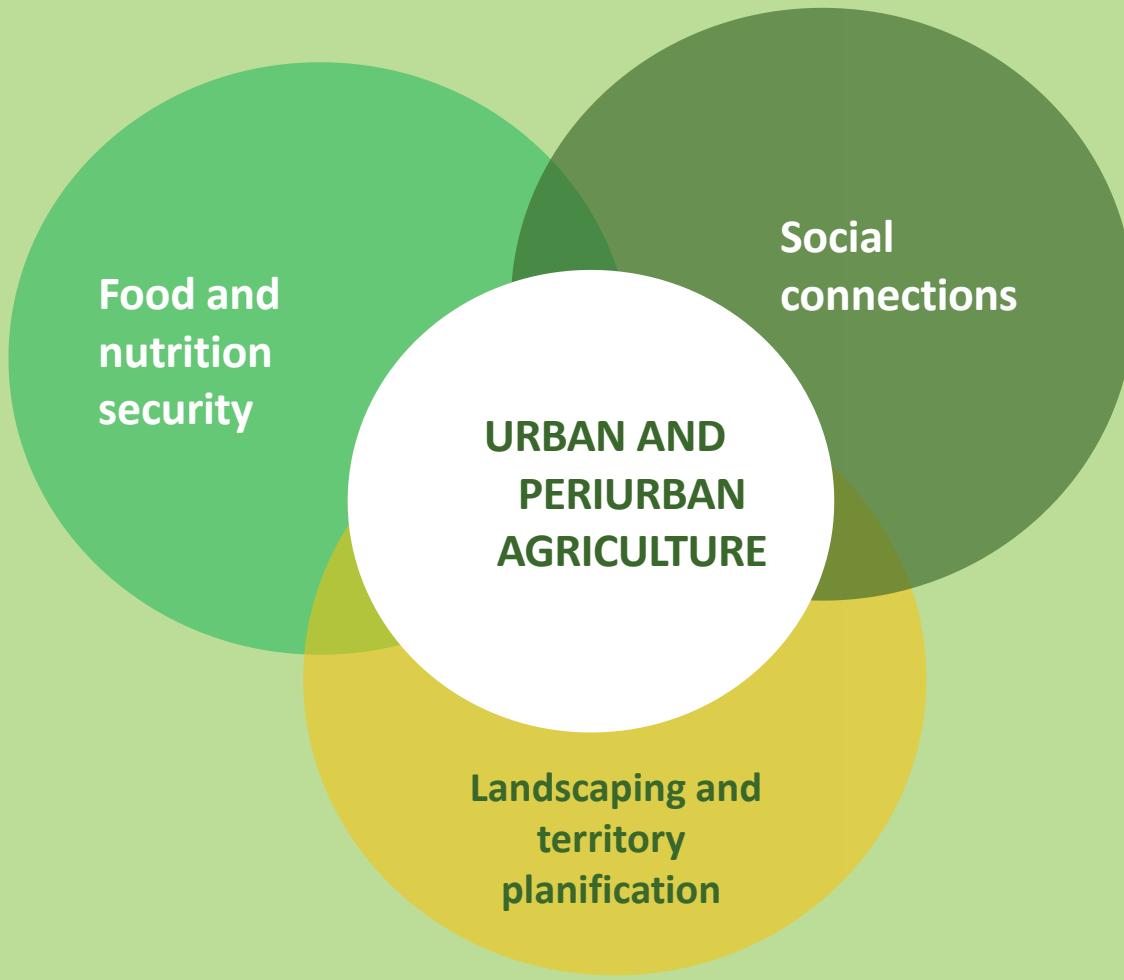
## Conservation Education



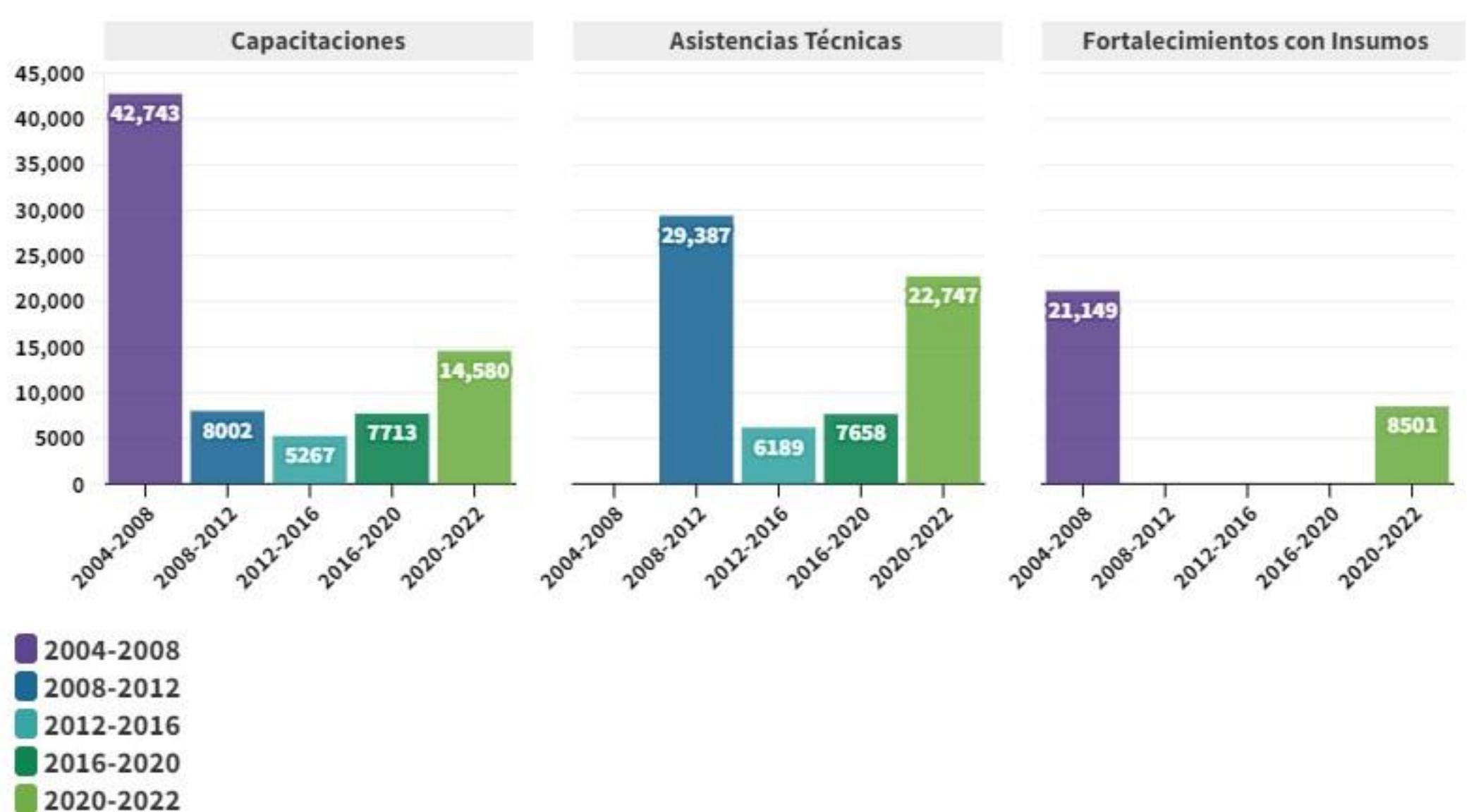
promoting an environmental stewardship in Bogotá by increasing social participation and conservation education.

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# Urban Agriculture multifunction



# Urban Agriculture background in Bogotá D.C.





# PROYECTO 7681

## “Fortalecimiento de la agricultura urbana y periurbana en las localidades urbanas de Bogotá D.C.”

- 
1. Increase crop productivity in urban and peri-urban agriculture projects
2. Formulate and implement the district program for urban agriculture
3. Strengthen social organization processes around urban agriculture
- Strengthen urban agriculture as a practice that enhances food production, environmental management, sustainable use of natural resources and social connections.

# RESULTS (august 2022)

## 1. To Increase crops productivity and crops returns:

**15.241 people trained (76,2%) courses and trainings on topics as** species transformation, irrigation and drainage, green house, seed banks (germplasm banks), marketing and sustainability.



**24.146 people supported (60,4%)** creating dynamics between traditional and technical knowledge for the development of production processes and the achievement of food security and sovereignty.

### 9.310 Garden beds enriched (45%)

Most of the materials and bio-supplies delivered came from JBB internal production processes (seedlings and substrate) and some from third party contracts.



# Urban Agropark

**"A new social and environmental contract for the Bogotá of the 21st century"**

City Agreement No. 761 of 2020 "by which the economic, social, environmental and public works development plan of the city is adopted 2020-2024.

**Article 110. *Green urban renewal strategies.*** The District Government will prepare technical and legal studies to develop or update strategies that allow the consolidation of public or private green spaces, which improve the supply of ecosystems services with approaches to mitigate the climate crisis, prioritizing the intervention of areas through the reconversion of hard soil to soft soil with native species and urban agro-parks. These strategies may incorporate environmental economic instruments that demonstrate cost-efficiency and contribute directly to the improvement and maintenance of urban vegetation covers.

**Decree 555 of 2021 "By which the general review of the Territorial Planning Plan of Bogotá D.C. is adopted"**

- Recognition of Urban Agriculture as an environmental design criteria for the pedestrian public space system (Article 122, Decree 555 of 2021).
- Articulation of urban agriculture to related services and activities in the pedestrian public space system (Article 125, decree 555 of 2021).



Jardín agroecológico JBB.

# Ciudad Montes Urban Agropark

- Puente Aranda county

Location:



Meeting spaces:



It is a vegetable garden that articulates productive chains and functionally; integrates agroecological production and management, garden products transformation and marketing, and promotes social connections.

Zoning: areas that can be found in the Agropark:

- Crops – vegetable garden beds.
- Organic waste management
- Green house
- Harvest collection and storage
- Harvest transformation (Gastronomic Center)
- Marketing (Farmer's market)
- Complementary Areas (flower beds, natural open classroom)

# Urban Agriculture Research background

From 2004 to 2022, different related lines of research have been developed: Sustainable use of plant species; species propagation.

154 species belonging to 62 botanical families have been investigated; their potential in the medicinal, industrial and agri-food fields has been determined.

The Botanical Garden participated in the "Grant No. 664-2014 for the support of innovation in Gastronomy-2014" of COLCIENCIAS.

Articulation with Universities and Research groups:  
National University of Colombia, Minuto de Dios  
University Corporation, Francisco José de Caldas District  
University, Javeriana Pontifical University, CESA.



# Urban Agriculture Applied Research

Development of technological packages on propagation, crop management, plant health and bioprospecting in useful species for urban and peri-urban agriculture.

## Propagation



## Agronomic management



## Sanitary and nutritional management



## Use and Transformation



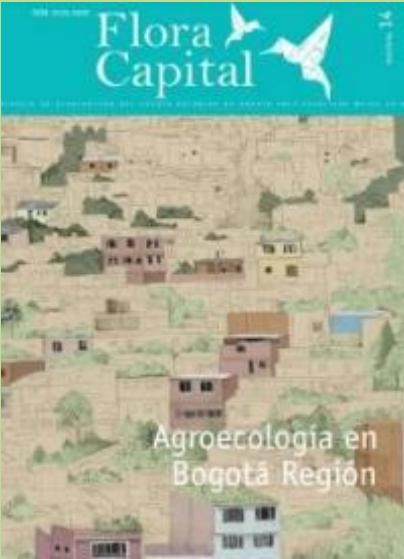
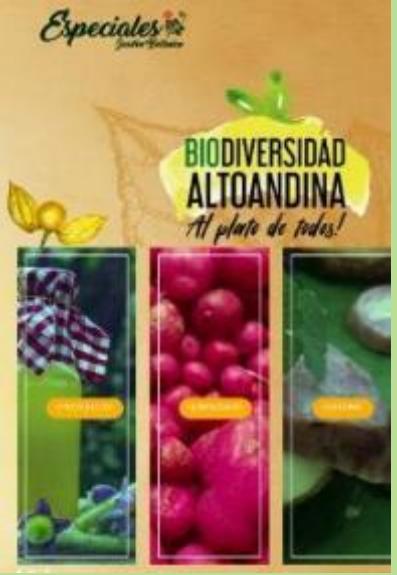
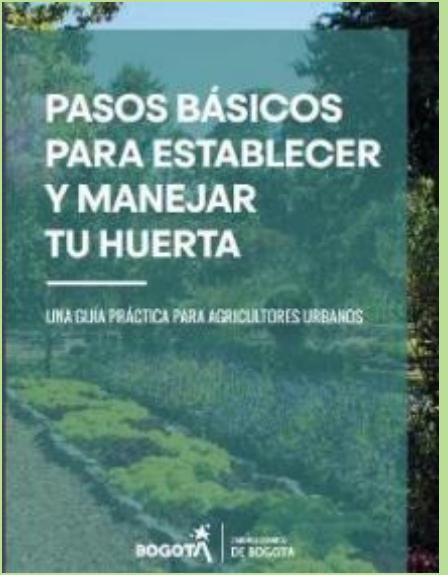
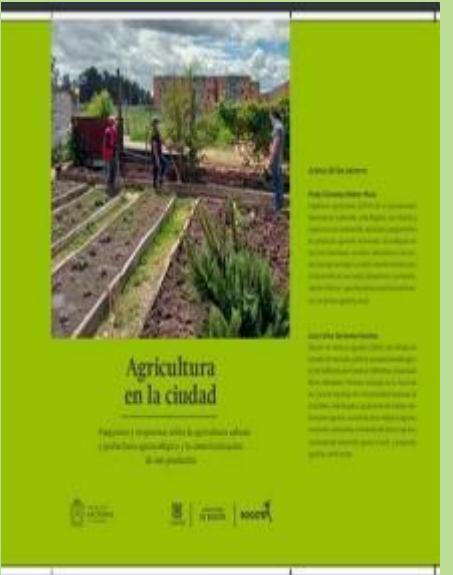
- Soil and substrate mix
- Irrigation techniques
- pre-germinatives treatments

- Solar exposition
- Planting densification
- Planting containers

- Identification of phytosanitary problems
- Agroecological management
- Microbial broths
- Macronutrient antagonism and solubility tests

- Species Bromatology
- Processing and use protocols
- Acceptability and Shelf Life Assessment

# Promotion and disclosure



**Agroecological Urban Agriculture JBB Publications**

Jardín Botánico de Bogotá | Facebook | Twitter | Instagram

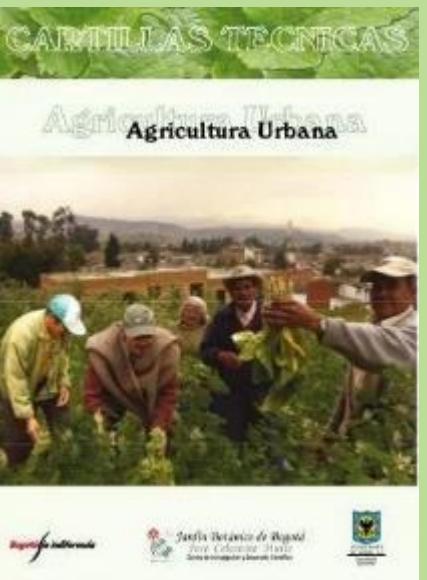
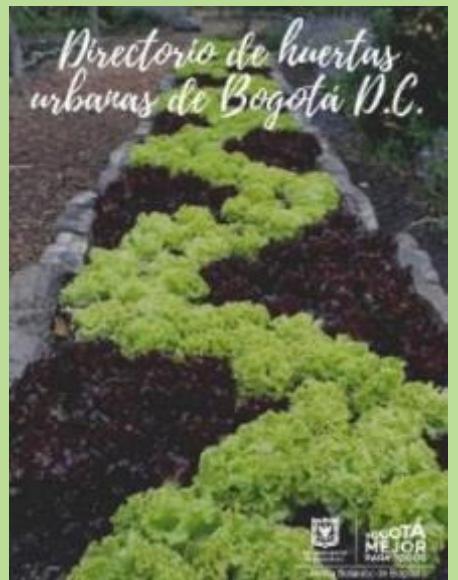
**Construcción colectiva y participativa del PROTOCOLO PARA LA IMPLEMENTACIÓN Y/O MANTENIMIENTO DE HUERTAS URBANAS Y PERIURBANAS EN ESPACIO PÚBLICO**

Resolución 361 de 2020 "Por la cual se establecen disposiciones en materia de reglamentación de la actividad de agricultura urbana y periurbana agroecológica en el Espacio Público del Distrito Capital de Bogotá, regulado por el Decreto 552 de 2018"

Comparte con nosotros tus comentarios, ideas y sugerencias hasta el 18 de abril de 2021, a través del correo: agriculturaurbana@jbb.gov.co

#BogotáReverdece

Jardín Botánico de Bogotá | Facebook | Twitter | Instagram



JARDÍN BOTÁNICO  
DE BOGOTÁ



# Promotion and disclosure

## 2021- 2022 Social media informative contents

- Facebook: 370.
- YouTube: 44 videos.
- Twitter: 891.
- Instagram: 163 .
- Total social media: 1.468.

## Content creation and growth in “Bogotá es mi Huerta Portal”

- News        2021: 22  
                  2022: 15
- Blogs:      2021: 4  
                  2022: 55

Tutorials (aprende) 2021: 22 / 2022: 9

Total publications: 127

Total Website Visits : ([www.jbb.gov.co](http://www.jbb.gov.co)): 8.657 visits

News media Impacts by free press sobre AUPA (2021-2022).

261 news and reports on community and mass media networks.





**de huerta  
en huerta**  
Rutas agroecológicas por Bogotá

Participa en la inauguración de  
nuestra nueva ruta

**Centro**  
29/03/2022

**Agenda**

- 8:00 a.m.  
Experiencia Fábrica de Loza  
Av. Los Comuneros Cra. 2A
- 10:00 a.m.  
Experiencia Santa Elena  
Cra. 5A # 31 - 40
- 11:00 a.m.  
Experiencia Quinta de Bolívar  
Cll. 21 # 4A - 30 este
- 12:00 m.  
Experiencia del Cóndor  
Cll. 10 # 3 - 41
- 1:00 p.m.  
Experiencia Botánico Hostel  
Cra. 2 # 9 - 87

Disponibilidad máxima de 6 horas

Se recomienda el uso de ropa cómoda, calzado antideslizante, protección solar, paraguas e hidratación.

Organiza:  
Jardín Botánico de Bogotá  
con el apoyo del Instituto Distrital de Turismo

Si requieres más información  
comunícate al correo  
rutaagroecologica@jbb.gov.co

BOGOTÁ SISTEMA INTEGRAL DE AGUA Y SUELO

**BENEFICIARIO  
ADMINISTRATIVO DEL SERVICIO  
CIVIL DISTRITAL** BOGOTÁ Sigue en nuestras redes:

**7 Edición** Bogotá es mi huerta Programa Digital de agricultura urbana y perenne.

**Mercados Campesinos Agroecológicos**

Lugar: Plazaleta principal del Jardín Botánico

SÁBADO 5 DOMINGO 6  
9 am / 3 pm #Bogotáenmihuerta 9 am / 3 pm

Cultivamos, compartimos, nos alimentamos

**Tertulia  
de la conservación**

Plantas e interacciones usadas  
en la agricultura urbana

MIÉRCOLES 20 | 02 ABR | PM | LIVE | TEAMS

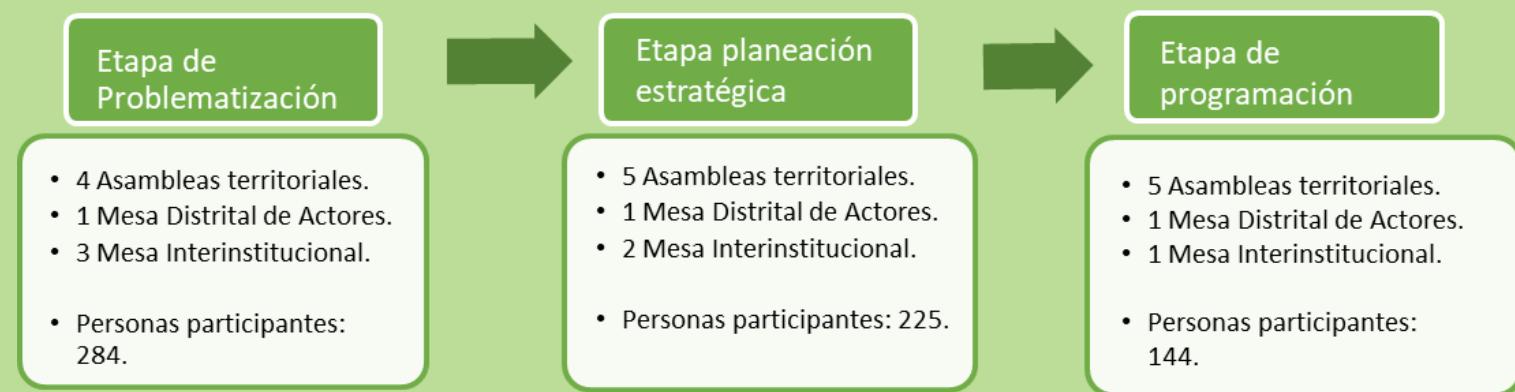
BOGOTÁ SISTEMA INTEGRAL DE AGUA Y SUELO

## 2. To formulate and implement the urban agriculture district program



**Bogotá es  
mi huerta**

Programa Distrital  
de agricultura urbana  
y periurbana



### Integrative Action Plan:

- 8 components
- 43 initiatives/projects
- 182 activities



### Participation meeting spaces:

- Territorial assemblies.
- District table.
- Interinstitutional team.



\* Aporte de 26 public/ community organizations.

### 3. Strengthen processes of social organization to promote urban and peri-urban agriculture

## NETWORKING AND SUPPORTED NODES



1. TUNJUELITO



2. LOS MARTIRES



3. LA CANDELARIA



4. TEUSAQUILLO



5. KENNEDY



6. RAFAEL URIBE



7. SUBA



8. ANTONIO NARIÑO

+ 290 networking leaders

+ 2.000 people reached by urban agroecological practices

+ 100 activities that promoted social interaction and participation.

# “Bogotá es mi Huerta” Platform

“Bogotá es mi huerta” is a co-created website. It was implemented in 2021 by an alliance with Organizations for the Iberoamericans states for the Education, Science and Culture OEI.



Source: City General Secretary. Award recognition to JBB “Bogotá es mi Huerta”, second place transparency subcategory, Open and honest Government Bogotá 2021

- 9 meses de funcionamiento
- 15. 121 Usuarios registrados
- 49.769 Visitas al micrositio



# Agroecological Routes goals

**Goal:** to create and consolidate 5 agroecological routes.

**Progress:** 2 routes  
**Suba y Centro**

## ¿Qué es un ruta agroecológica?

Experiencias auténticas alrededor de la agricultura urbana

Una ruta agroecológica es un recorrido interactivo en donde las huertas urbanas y periurbanas de Bogotá se conectan entre sí.

Está acompañado de actividades basadas en la educación ambiental y la agricultura como eje principal de un nuevo escenario de relación humano-naturaleza.

Esta iniciativa educativa y turística busca dar a conocer y fortalecer procesos ícono de la agricultura urbana y periurbana de la ciudad a locales y extranjeros.



**de huerta en huerta**  
Rutas agroecológicas por Bogotá

**Conoce nuestras RUTAS AGROECOLÓGICAS**  
[CLIC AQUÍ](#)

**La BOGOTÁ**  
Tu mejor opción turística



**de huerta en huerta**  
Rutas agroecológicas por Bogotá

**ALCALDÍA MAYOR DE BOGOTÁ D.C.**



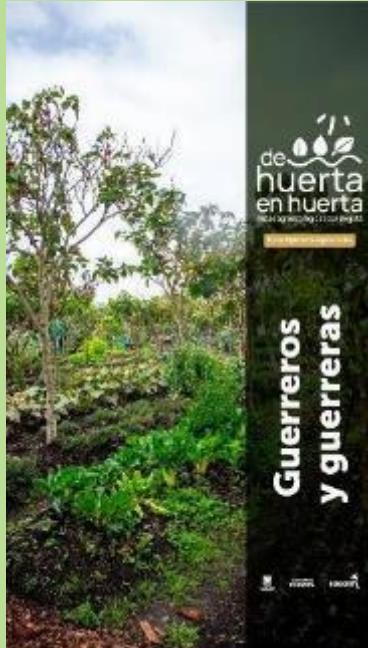
 **INSTITUTO DISTRITAL DE TURISMO**

 **BOGOTÁ**

 **JARDÍN BOTÁNICO DE BOGOTÁ**

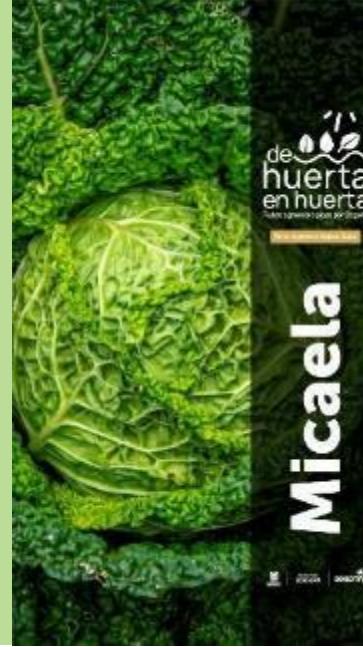
 **BOGOTÁ**

# Going back to the soil



Social network

**SERVICES**  
AUP Workshop  
Vegetables and  
Plants sales  
Mingas



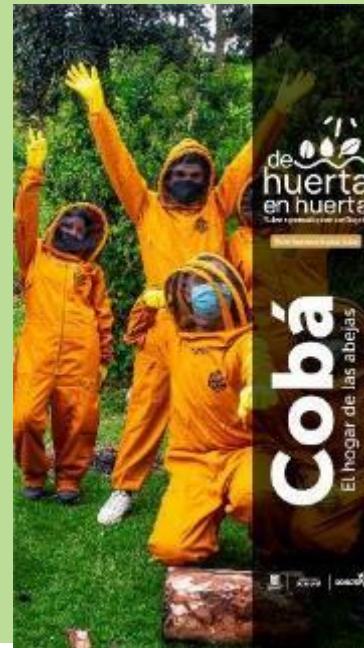
Garden Beds  
Vegetables

**SERVICES**  
Processing Workshop  
Vegetables market  
Experimental tour



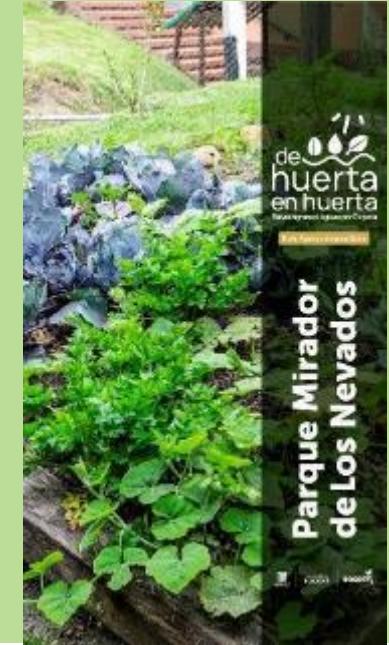
Greenhouse  
environmental

**SERVICES**  
Plants marketing  
Nature experience



Auto  
sustainability

**SERVICES**  
Apiculture workshop  
Processing  
marketing  
Vegetable market



Institutional  
support

**SERVICES**  
Workshops and  
guided tours  
Nature experience

# Going back to the soil



FÁBRICA DE  
LOZA BAKATA



BOTÁNICO HOSTEL



SANTA ELENA



MESTIZA QUINTA  
DE BOLÍVAR



DEL CONDOR

## Community and natural Patrimony

### **SERVICES**

- Physical and mental wellness
- Cultural activities
- Historical Value

## Plants Art and magic

### **SERVICES**

- Accommodation
- Gastronomic offer
- Yoga

## Processing

### **SERVICES**

- Transformation workshops
- Composting
- Traditional and vegetarian cooking

## Permanence In time

### **SERVICES**

- Natives species
- Patrimonial trees

## Ancestral wisdom

### **SERVICES**

- Apothecary
- Ancestral food and beverages
- Sacred stone



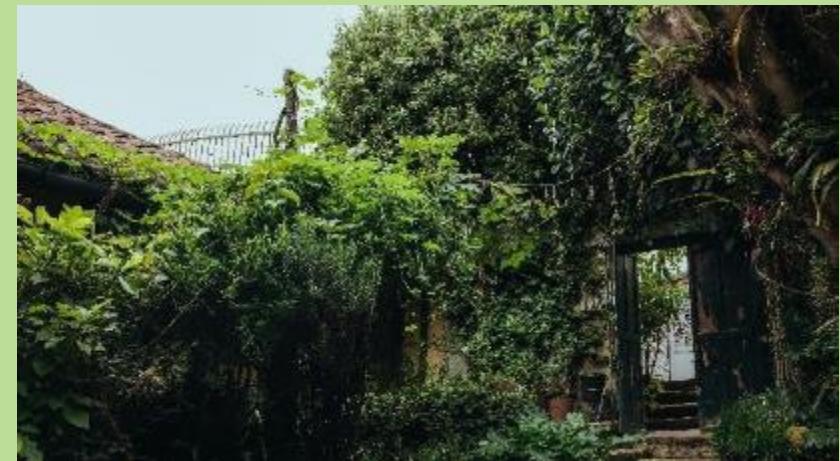
**CAFE VIRTUAL  
DE HUERTA  
EN HUERTA  
SUBA**

Jueves  
11 de agosto  
4:00 pm





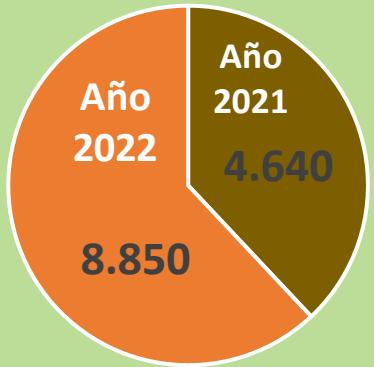



# Agroecological Farmers Market



2021 YEAR 6  
2022 YEAR 9

15 Farmers  
Market  
en articulación  
con la SDDE



13,490 Kilos  
FOOD VOLUME



Urban agriculture  
Farmers  
Local entrepreneurs  
Mujeres que Reverdecen

504  
Exhibitors



Bogotá es  
mi huerta



SECRETARÍA DE  
DESARROLLO  
ECONÓMICO



INSTITUTO PARA LA  
ECONOMÍA  
SOCIAL



JARDÍN BOTÁNICO  
DE BOGOTÁ



# Organic Farmers Markets Achievements

## Hygiene and food handling courses



**Development of 6 hygiene and food handling courses in coordination with SENA, for urban farmers who sell products from their garden beds and enterprises of Mujeres que Reverdecen**

## Inter-institutional articulation



**Coordination and inter-institutional strengthening between the JBB, SDDE, IPES and IDT for the development of marketing strategies for urban and peri-urban agricultural products**

## Event participation



**Positioning of urban agriculture in brand events such as: Showroom Cotelco (IDT), Mercado Campesino Plaza de Bolívar (SDDE), comercialización de canastas de AUP (IDPYBA).**



# B O G O T Á



Mercado Campesino Agroecológico  
**Huerta Chavela**  
Suba



**Huerta Asograng**

Ciudad Bolívar – M.C.A.



**Huerta Chavela**

Suba – M.C.A.



Mercado Campesino Agroecológico  
**Huerta Lolita**  
San Cristóbal

# B O C G O T Á



**Huerta del Cabildo de Bosa**  
Bosa



**Huerta Guerreros**  
Suba



**Huerta Petunias**  
Engativá

# Brand experience Bogotá is my Huerta

## First anniversary agroecological farmers markets



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# Huertas Plan Centro



Huerta  
La Favorita



Huerta  
Amar



Huerta  
La Fortaleza

## Transformation of SPA sales premises into orchards

### Entidades participantes en el proceso

- UAESP - Unidad Administrativa Especial de Servicios Públicos
- IDIPRON (grupos de jóvenes)
- Fundación FUGA- Fundación Gilberto Álvarez Avendaño
- Alcaldía Local de Los Mártires
- Alcaldía Local de Santafé
- Fundación Amanecer
- Adulto mayor de la localidad
- Red de Agricultores de Los Mártires
- Centro Crecer "Amar"



ALCALDÍA MAYOR  
DE BOGOTÁ D.C.

JARDÍN BOTÁNICO  
DE BOGOTÁ



# Mujeres que Reverdecen

## Achievements October 2021 – April 2022



1,119 beneficiaries trained in various topics, highlighting training in urban agriculture.



Syllabus and appropriate methodologies for practical theoretical training in topics such as: urban agriculture, gardening, plant propagation, tree management, etc.



924 active women as of April 30, 2022 from 18 localities, with the main participation of inhabitants of the locality of Bosa with 183 women (19.8%), followed by Ciudad Bolívar with 143 women (15.5%) and Kennedy with 14.4 %.



88.2% are households women heads, 74.8% are women with dependents, including minor children or older adults.



# Manzanas de cuidado (caring blocks) and ethnic communities



Trainings, technical support and strengthening of the following ethnic communities :

- ✓ Cabildo Muisca de Bosa
- ✓ Cabildo Muisca de Suba
- ✓ Raizales
- ✓ Palenqueros
- ✓ Afro
- ✓ Rrom



Technical assistance to caregivers in home and community gardens

Strengthening of household and community gardens with the delivery of supplies to caregivers' gardens.



Thank you!

